To: Dirscherl, Christopher[Dirscherl.Christopher@epa.gov]
Cc: Sarah Peters[peters@mcginnisandassociates.com]; Ginny Hatch[ghatch@ypt-nsn.gov]
From: Dietrick McGinnis
Sent: Mon 11/9/2015 9:57:56 PM
Subject: RE: Selenium Eco-SSL Guidance

I talked to SEM here in Reno (John Faulstich, 775.857.2400), they are already doing samples for the PRPs/PRP consultants for the area and for some samples they can get 0.5. The "some samples" are sandy loams away from the mine, but those are also the ones in greater need of the lower RL.

If a hydride generator/AA method is used such as 7742, 7062, or 7741A, a rather old-school way, it is will help with the interferences and more likely provide much lower RL. However it is not a common method and may require a bit of effort to find a lab or talk one into doing it; we have enough work for that however. For current methods, just tuning the MS for selenium and running it separately will improve DL, not to the level of hydride generator/AA, but definitely better than what is proposed.

In short, site materials with the worse interferences may likely yield higher values for selenium. They are not a problem. Material farther away from the site has less interferences but the lower RL is needed. To achieve the lower RL the selenium may have to be run separately or even by an alternative method to meet the DQOs.

This is a problem site-wide so I think this is something worth our time to solve. Selenium analysis will not be cheap but the data is that valuable.

Dietrick

Dietrick McGinnis PhD PE CEM

McGinnis & Associates

65 Regency Way, Suite C, Reno, NV 89509

775.853.0449 p, 775.853.0243 f

McGinnisandAssociates.com

From: Dirscherl, Christopher [mailto:Dirscherl.Christopher@epa.gov]
Sent: Monday, November 09, 2015 1:19 PM
To: Dietrick McGinnis
Cc: Rodriguez, Dante
Subject: RE: Selenium Eco-SSL Guidance

Do you know which lab was able to report to the numbers in the Interim Final document and via which method? From my research it seems that most labs report only at 1.0mg/kg, perhaps 0.9mg/kg, the latter of which is especially difficult considering the probable interference from the other metals.

Thanks!

Chris

From: Dietrick McGinnis [mailto:dmcginnis@mcginnisandassociates.com]
Sent: Monday, November 09, 2015 12:44 PM
To: Dirscherl, Christopher <Dirscherl.Christopher@epa.gov>
Cc: Rodriguez, Dante <Rodriguez.Dante@epa.gov>
Subject: RE: Selenium Eco-SSL Guidance

Thanks! That is the one we have in house so we are current. I think we need to coordinate with Dante to have them go for lower RLs in the work plan, at least an order of magnitude. We can get those levels but we had to coordinate with the lab and, in some cases, have separate extractions analyzed.

Dietrick

Dietrick McGinnis PhD PE CEM

McGinnis & Associates

65 Regency Way, Suite C, Reno, NV 89509

775.853.0449 p, 775.853.0243 f

McGinnisandAssociates.com

From: Dirscherl, Christopher [mailto:Dirscherl.Christopher@epa.gov]
Sent: Monday, November 09, 2015 12:41 PM
To: Dietrick McGinnis; Sarah Peters
Cc: Rodriguez, Dante
Subject: Selenium Eco-SSL Guidance

Hi Dietrick and Sarah,

As we briefly spoke about on Friday's call, the most recent EPA Eco-SSL Guidance document for selenium is the July 2007 Interim Final version, attached. However, EPA updated the Eco-SSL Guidance and Documents webpage on September 30, 2015 indicating the following regarding mammalian and avian Eco-SSLs: "EPA plans to issue Eco-SSLs for up to 10 more contaminants next year, including values for copper, DDT, manganese, nickel, total PAHs, **selenium**, silver, and zinc." Let's hope this comes to fruition.

Regards,

Chris

Christopher Dirscherl, P.E.

Remedial Project Manager

Superfund Division (SFD-8-2)

U.S. EPA Region 9

(415) 972-3315